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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/478,367	01/06/2000	Kazunari Yoshida	0020-4657P	1595

7590

11/05/2003

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EXAMINER

GORDON, RAEANN

ART UNIT PAPER NUMBER

3711

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/478,367

Applicant(s)

YOSHIDA ET AL.

Examiner

Raeann Gorden

Art Unit

3711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-7 is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al (5,184,828) in view of Hiraoka et al (5,711,723) and Saito et al (4,858,924).

Kim et al discloses a golf ball with a two-layered core and a cover. The inner core has a diameter from 23 to 35 mm and center Shore D hardness from 30 to 48 (50 to 73 JIS-C) (fig 1). The inner core comprises polybutadiene, a co-crosslinking agent, organic peroxide, and a filler (col 3, lines 65-69; col 4, line 25). The Shore D hardness at a distance 15 mm away from the center is 45 (69 JIS-C) (table 1, examples 1). This value is 7 Shore D units (19 JIS-C) higher than the center. The outer core has a thickness from 0.5 – 9 mm (fig 1) and a Shore D hardness from 30 to 56 (50 to 84 JIS-C). The outer core comprises polybutadiene, a co-crosslinking agent, organic peroxide, and a filler (col 3, lines 65-69; col 4, line 25). Table 1, example 1 shows the outer core Shore D hardness higher than the center hardness by 6 units (18 JIS-C). Kim discloses a ionomeric cover layer thickness of 2 mm (table 1) but does not disclose a cover comprising an ionomer and a thermoplastic elastomer or diene block copolymer.

However, Hiraoka teaches a three piece golf ball with a cover made from an ionomer

and polyurethane (elastomer) (col 4, lines 20-25) and a Shore D hardness from 59 to 70 (col 5, line 9). Saito teaches a cover comprising 97 to 65% ionomer and 3-35% by weight of an elastomer (abstract). One skilled in the art would have modified the invention of Kim with the cover of Hiraoka and Saito for improved flight performance and durability.

Allowable Subject Matter

Claims 4-7 are allowed.

Response to Arguments

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raeann Gorden whose telephone number is 703-308-8354. The examiner can normally be reached on Monday-Fridays from 7:30 AM to 5:00 PM.

The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7768 for regular communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

A handwritten signature in black ink, appearing to read 'Raeann Gordon', is written over the printed name.

Raeann Gordon
Examiner
Art Unit 3711

rg
October 30, 2003